

RECEIVED PRO  
JUN 17 2014

GENERAL PERMIT REISSUANCE TRACKING SHEET

Facility Name: Vulcan Construction Materials LP - Jack Quarry County: Pinwiddle

Owner: Vulcan Construction Materials LP Permit #: VAG84 0126

Permit Writer: UBC/BR/C

	Date
Registration Statement Received (UPDATE CEDS)	5/14/14
Additional Information Requested	
Additional Information Received	
Fee Deposit Received	5/27/14
Registration Statement Considered Complete	5/14/14
Registration Statement to TMDL staff	6/5/14
All Applicable Information entered into CEDS	6/14/14
Application Information Added to General Permit Tracking Spreadsheet	6/16/14

add ch

Concurrences

Signature	<u>D. Gutzger</u>	<u>Z.C. Adams</u>		
Date	<u>6/16/14</u>	<u>6/30/14</u>		

**MEMORANDUM**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**


**VALLEY REGIONAL OFFICE**

4411 Early Road - P.O. Box 3000

Harrisonburg, VA 22801

SUBJECT: Registration Statement Errata for VPDES Permit No. VAG840126, Vulcan Construction Materials – Jack Quarry

TO: GP File

FROM: Olive Critzer 

DATE: March 25, 2014

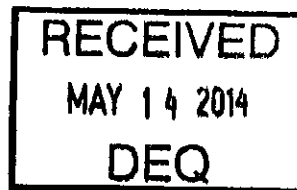
The following deficiency was noted in the subject general permit registration statement:

The facility name is Vulcan Construction Materials – Jack Quarry  
Our records and the topo map show that the receiving waters is Booth Run

The above deficiency in the registration statement is considered to be insignificant in that it will not affect the reissuance of the general permit.



Ms. Olive B. Critzer  
Valley Regional Office  
Department of Environmental Quality  
PO Box 3000  
Harrisonburg, VA 22801



March 17, 2014

RE: Reissuance of Nonmetallic Mineral Mining General Permit No. VAG840126  
Vulcan Construction Materials Company – Jack Quarry – Dinwiddie County

Dear Ms. Critzer,

Enclosed, please find the General Permit Registration form and appropriate attachments for the above referenced facility.

We propose no changes to the existing permitted facilities and desire only to obtain a reissuance on the General Permit. Please provide DMR forms for the process water outfall 001 and the representative stormwater outfalls 002 and 008 described in the following enclosures. It should be noted that all process water outfalls do not include discharges from vehicle washing activities or oil water separator discharges; therefore, petroleum hydrocarbon sampling should not be included on the DMR form for each process water outfall.

Thank you for your kind assistance in this matter. If you have any questions and/or comments, please contact Brian Parker of Cardno MM&A at (804) 441-8388 or myself at (804) 717-8374.

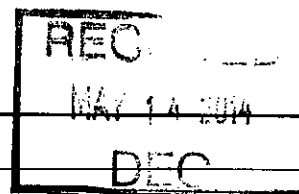
Sincerely,

*Walter C. Beck III*

Walter Beck  
Environmental Engineer

Enclosures

**VPDES GENERAL PERMIT REGISTRATION STATEMENT  
NONMETALLIC MINERAL MINING**



1. Facility Owner: Vulcan Construction Materials, LP C/O Walter Beck
2. Owner Mailing address: Street or P.O. Box 5601 Iron Bridge Parkway, Suite 201  
City or Town Chester State Virginia Zip Code 23831
3. Owner Telephone #: (804) 717-5770 4. Owner Email: BeckW@VMCMAIL.com
5. Contact Name: Walter Beck 6. Contact Telephone #: (804) 717-8374
7. Contact Email: BeckW@VMCMAIL.com
8. Facility Name: Jack Quarry 9. Facility Lat/Long (deg-min-sec): 37-11-58 / 77-30-44
10. Facility Address: 23308 Cox Road, Petersburg, VA 23803  
(County, Street Number, City or Town, State, Zip)
11. Description of mining activity (mineral mined):  
Extraction of granite and production of crushed stone products for the construction industry.
12. Primary SIC code: 1423 Secondary SIC codes: \_\_\_\_\_
13. Does this mine currently have a VPDES permit? Yes ☒ No ☐ (If yes, give permit number) VAG840126
14. Discharge Information: PLEASE SEE ATTACHED OUTFALL DESCRIPTIONS

OUTFALL NUMBER	OUTFALL TYPE (see note 1)	SOURCE OF DISCHARGE (see note 2)	RECEIVING STREAM AND WETLANDS	LATITUDE/ LONGITUDE (deg-min-sec)

**Notes:**

1. Outfall Type - list as (1) process wastewater, (2) storm water, or (3) process water commingled with storm water.
2. Source of Discharge (If the outfall has a combination of these sources, list all that apply): (1) mine pit dewatering, (2) storm water associated with industrial activity, (3) storm water not associated with industrial activity, (4) ground water infiltration, (5) wastewater from vehicle or equipment degreasing activities, (6) vehicle washing, (7) mined material washing, (8) return water from operations where mined material is dredged, (9) noncontact cooling water, (10) miscellaneous plant cleanup wastewater, (11) co-located facility discharges (identify the co-located facility), (12) emergency outfall for process water systems designed as "no discharge" or (13) other discharges not listed here (describe).

15. Is the process water system designed to operate as "no discharge?" Yes ☐ No ☒ (see instructions).
16. Storm Water:
- a. Indicate which exclusively storm water outfalls (if any) will be representative outfalls that require a single Discharge Monitoring Report (DMR). SEE ATTACHED OUTFALL LIST FOR REPRESENTATIVE OUTFALLS
- b. For storm water outfalls which are to be represented by other outfall discharges, attach a description of the activities associated with those outfalls and explain why they are substantially the same as the representative outfall to be sampled.
- c. Does the storm water discharge from a storm water management structure (a series of large settling sedimentation basins). Yes ☒ No ☐
- d. Storm water pollution prevention plans (SWPPPs) do not need to be submitted with this registration. However, see requirements for development, updating and implementation in instructions below.

17. If the facility discharges to the Chickahominy watershed above Walkers Dam, provide monitoring data to demonstrate compliance with 9VAC25-260-310 m (Chickahominy special standards) as per Part I B 14 of the 2014 VPDES Nonmetallic Mineral Mining General Permit (if not already submitted to the Department under a different VPDES permit in a DMR).

18. Description of wastewater treatment or reuse/recycle systems, or both:

Solids settling in the pit and/or sedimentation basins prior to discharge

19. List any chemicals added to water that could be discharged:

Callaway (4310, 4325, 4330, 4345, 4848, 4880, 3455L, 3477, 3458, 6280), Jayfloc 3475, Rockfloc (3742R, 3746R, 3719R), RockDust (100, 3330), Paschal PFR (C453, F444, F485, C258, P255, D252, D253), Sodium Hydroxide, Hydrated Lime, Sulfuric Acid (20% Baume), Hydrochloric Acid

20. Indicate any co-located facilities:

21. Is this facility a hazardous waste treatment, storage, or disposal facility? Yes ☐ No ☒

22. Attach to this registration statement a schematic drawing showing the sources of water used for production, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solids. Identify outfall numbers listed in item 14 above.

23. Attach to this registration statement an aerial photo or scale map which clearly shows the property boundaries, plant site, drainage areas associated with each outfall, locations of all mine pit dewatering, existing, significant sources of materials exposed to precipitation, storm water management structures (if any), storm water or process wastewater outfalls listed in item 14 above and the receiving streams.

24. Attach to this registration statement evidence that the operation to be covered by this general permit has a mining permit which has been approved by the Virginia Department of Mines, Minerals and Energy, Division of Mineral Mining (or associated waived program) under the provisions and requirements of Title 45.1 of the Code of Virginia. Mineral mines owned and operated by governmental bodies not subject to the provisions and requirements of Title 45.1 of the Code of Virginia are exempt from this requirement.

Mining Permit No.: 05727AE

25. Does the facility discharge storm water into a Municipal Separate Storm Sewer System (MS4)? Yes ☐ No ☒

If yes, provide name of the MS4 operator \_\_\_\_\_

26. Would you like your permit sent to you electronically? Yes ☐ No ☒

If yes, please list the email address to send it to: Prefer hard copy; If possible, also email to BeckW@VMCMAIL.com

**Certification:**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signature: \_\_\_\_\_

*Walter C. Beck III*

Date: 3/17/2014

Print Name Walter C. Beck III

Title: Environmental Engineering

**Required attachments:**

1. Evidence of approved mining permit
2. Water use schematic drawing
3. Aerial photo or map

**FOR DEPARTMENT USE ONLY:**

Accepted/Not Accepted by: Brenda R. Jones

Date: 6/26/14

Basin James River

Stream Class II

Section 5

Special Standards ✓

TMDL Compliance Yes

## **SECTION 5.0 DISCHARGE SAMPLING AND ANALYSIS**

The General Permit requires sampling and analysis of point source discharges that fall in the following categories.

Mine dewatering and/or discharges of process wastewater, including commingled stormwater.

Stormwater discharges from other plant areas where the stormwater has contacted areas directly related to manufacturing, processing, or raw materials storage.

### **5.1 Process Water and Stormwater Sampling/Analysis Program**

Refer to Table 1 for required sample frequency and analytical parameters. There are three appropriate sampling locations at the Jack Quarry which will be used to sample various process water and stormwater discharges. Each outfall to be sampled is listed below along with a brief description of each outfall's type of discharge.

#### **Representative Outfalls to be Sampled:**

<b>Outfall No.</b>	<b>Latitude / Longitude</b>	<b>Receiving Stream</b>	<b>Outfall Type</b>	<b>Source of Discharge</b>
<b>333-001</b>	37° 11' 58" / 77° 30' 44"	Booth Run Creek	Commingled Process Water and Stormwater	Mine pit dewatering
<b>333-002</b>	37° 11' 56" / 77° 30' 49"	Booth Run Creek	Stormwater	Stormwater associated with industrial activity. This sample location will be representative of all discharges from stripping and overburden disposal areas and associated mine roads.
<b>333-008</b>	37° 11' 48" / 77° 30' 47"	Booth Run Creek	Stormwater	Stormwater associated with industrial activity. This sample location is representative of all discharges from yard and material stockpile areas.

*Note: There are a total of nine discharge points (8 Stormwater, 1 process water) at the Jack Quarry site.*

*Mine dewatering flows and runoff from yard and process areas which drain to the pit are pumped from the pit to a tertiary pond at outfall 333-001 and, from there, discharge to Booth Run Creek which flows to the Appomattox River.*

*Outfalls 333-002 and 333-003 are discharge points for runoff from an overburden & fines disposal area which does not drain to the pit. Outfalls 333-004, 333-005, and 333-006 are planned discharge points for runoffs from the expanded overburden disposal areas and mine roadways leading to these areas. Outfall 333-011 will be a discharge point for discharges from pit stripping areas. Outfall 333-002, which receives most of the runoff from overburden disposal areas, has been selected as the representative sampling point for this type of stormwater discharge. Outfall 333-007 no longer discharges due to grading on site; this outfall has been deleted from the permit.*

*Outfall 333-008 is representative outfall for yard and material stockpile areas runoff. This outfall sample point will represent outfall 333-009, which is a discharge point for a small portion of land around the employee buildings to the east. These discharge points release stormwater mostly from standard yard stormwater runoff. Outfall 333-010 has been removed from site due to outfall no longer discharging off property.*

The following table summarizes the total additional outfalls at this site which will not require sampling. The aforementioned outfalls that will be sampled have been linked to the following outfalls based on the overall type of discharge each additional outfall will represent. All outfall locations are indicated on the partial mine map in Appendix I.

Remaining Outfalls (not to be sampled):

Outfall No.	Latitude / Longitude	Receiving Stream	Outfall Type	Source of Discharge	Corresponding Representative Outfall*
333-003	37° 12' 07" / 77° 30' 45"	Booth Run Creek	Stormwater	Stormwater discharge from stripping and overburden disposal areas.	333-002
333-004	37° 12' 04" / 77° 30' 42"	Booth Run Creek	Stormwater	Stormwater discharge from stripping and overburden disposal areas.	333-002
333-005	37° 12' 27" / 77° 30' 45"	Booth Run Creek	Stormwater	Stormwater discharge from stripping and overburden disposal areas.	333-002
333-006	37° 12' 36" / 77° 29' 59"	Booth Run Creek	Stormwater	Stormwater discharge from stripping and overburden disposal areas.	333-002
333-009	37° 12' 02" / 77° 30' 10"	Tributary to Offsite Pond	Stormwater	Stormwater discharge from yard and materials stockpile areas.	333-008
333-011	37° 12' 14" / 77° 29' 43"	Tributary to Cattail Run	Stormwater	Stormwater discharge from stripping and overburden disposal areas.	333-002

\*Listed representative outfall is the appropriate sample point designated for that type of discharge; no grab sample needs to be taken for these additional listed outfalls.



COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF MINES, MINERALS AND ENERGY  
DIVISION OF MINERAL MINING  
P.O. BOX 3727  
CHARLOTTESVILLE, VIRGINIA 22903-0727  
(434) 951-6310

## PERMIT/LICENSE TO OPERATE A MINE

Permit/License No. 05727AE

Was issued to VULCAN CONSTRUCTION MATERIALS LP - JACK QUARR  
Whose main office is located at (MIDEAST DIVISION)  
CHESTER, VA 23831

For type of mineral(s) GRANITE  
Mine Type QUARRY Exemption Type N/A  
Located at 6 MILES SW OFF PETERSBURG ON RT 226  
County of DINWIDDIE

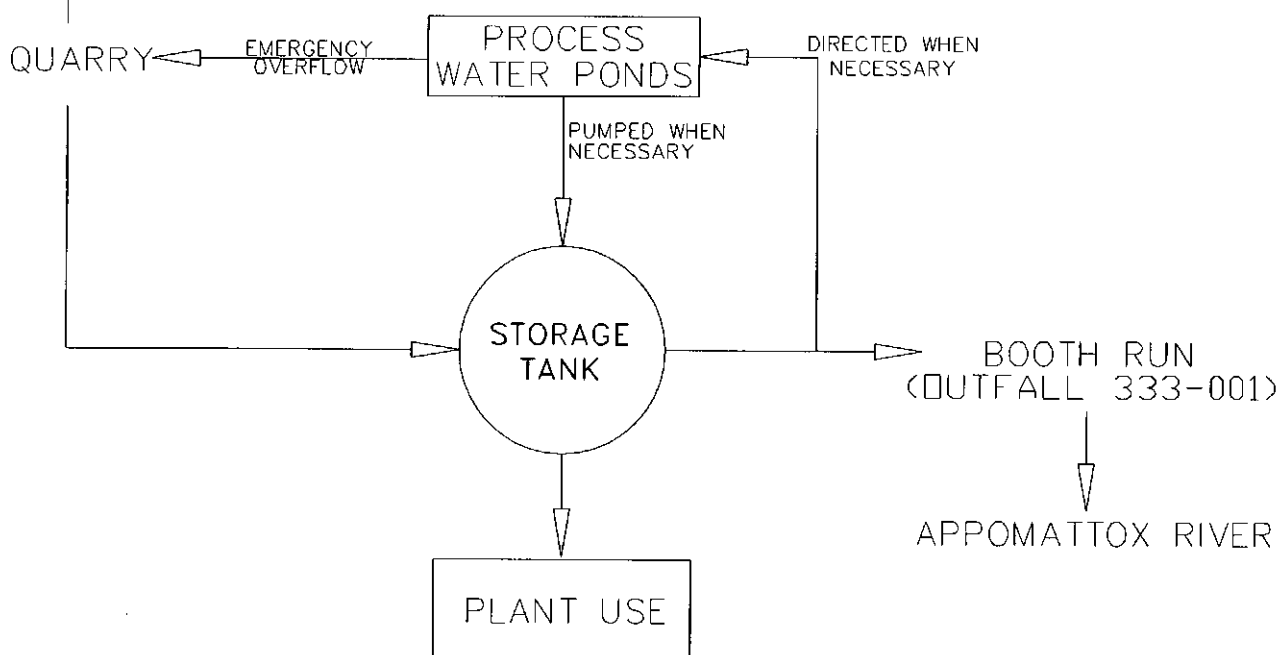
THIS PERMIT IS ISSUED PURSUANT TO CHAPTER 14.1 AND 16, TITLE 45.1, CODE OF VIRGINIA (1950), AS AMENDED Being an Act to require permits/licenses for certain mining operations and to fix conditions for issuance thereof; to provide that certain safety and reclamation practices be performed by mine operators and for inspection thereof; and to advise on satisfactory compliance; to require an annual report on progress of reclamation and tonnage of mineral mined; to provide for the Director to seek injunctive relief; to provide for a Board of Surface Mining Review, a Board of Mineral Mine Examiners, and to provide for appeals from rulings, violations and decisions of the Department or associated Boards.

Issued JANUARY 21 2004  
Covering 686.71 ACRES.  
Receipt number 25289

**THIS PERMIT/LICENSE MUST BE POSTED NEAR THE MINE OFFICE**



WATER SOURCE  
GROUNDWATER



DRAWING NOT TO SCALE

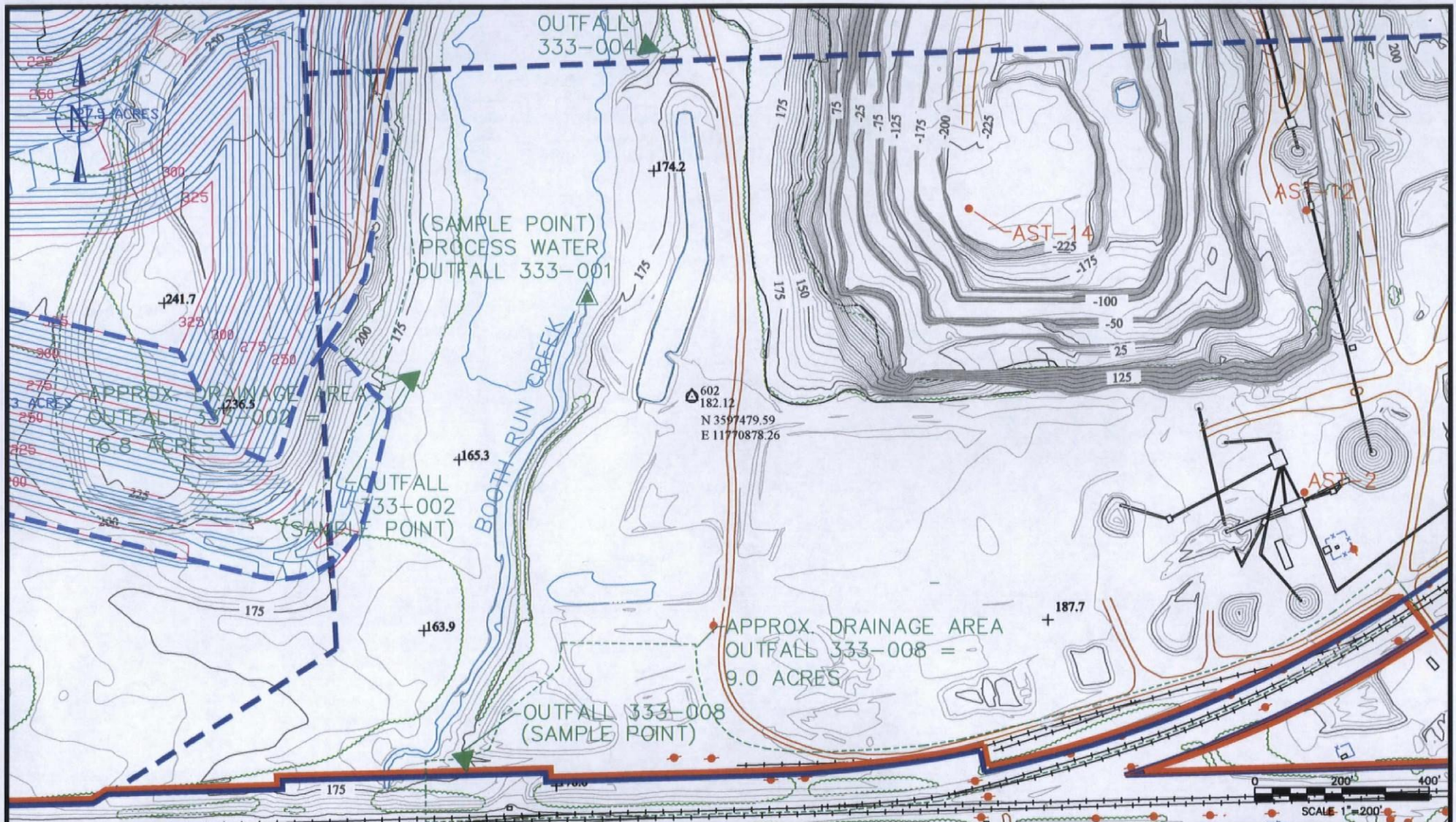
Prepared by:



WATER FLOW SCHEMATIC  
JACK STONE QUARRY  
DINWIDDIE, VA  
OCTOBER 2008

**Vulcan**  
Materials Company





SHEET

1 OF 3

Prepared by:

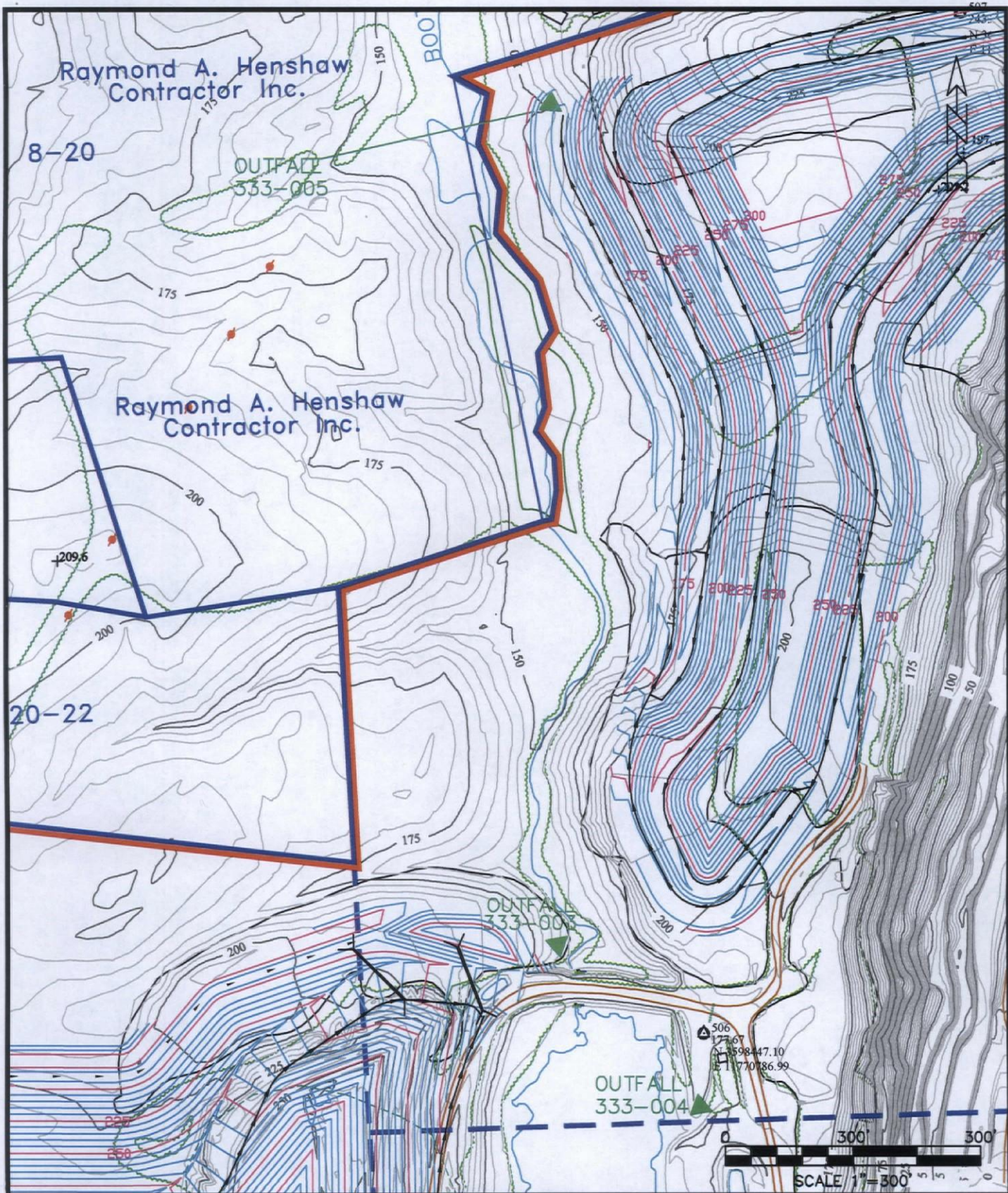


BMP/SPPP - OUTFALL LOCATION MAP  
JACK QUARRY  
PETERSBURG, VA

DATE: 5/24/11  
SCALE: 1"=200'  
DESIGNED: BMP  
DRAWN: BMP  
PROJECT# PR374-03

**Vulcan**  
Construction Materials





SHEET  
2 of 3

Prepared by:



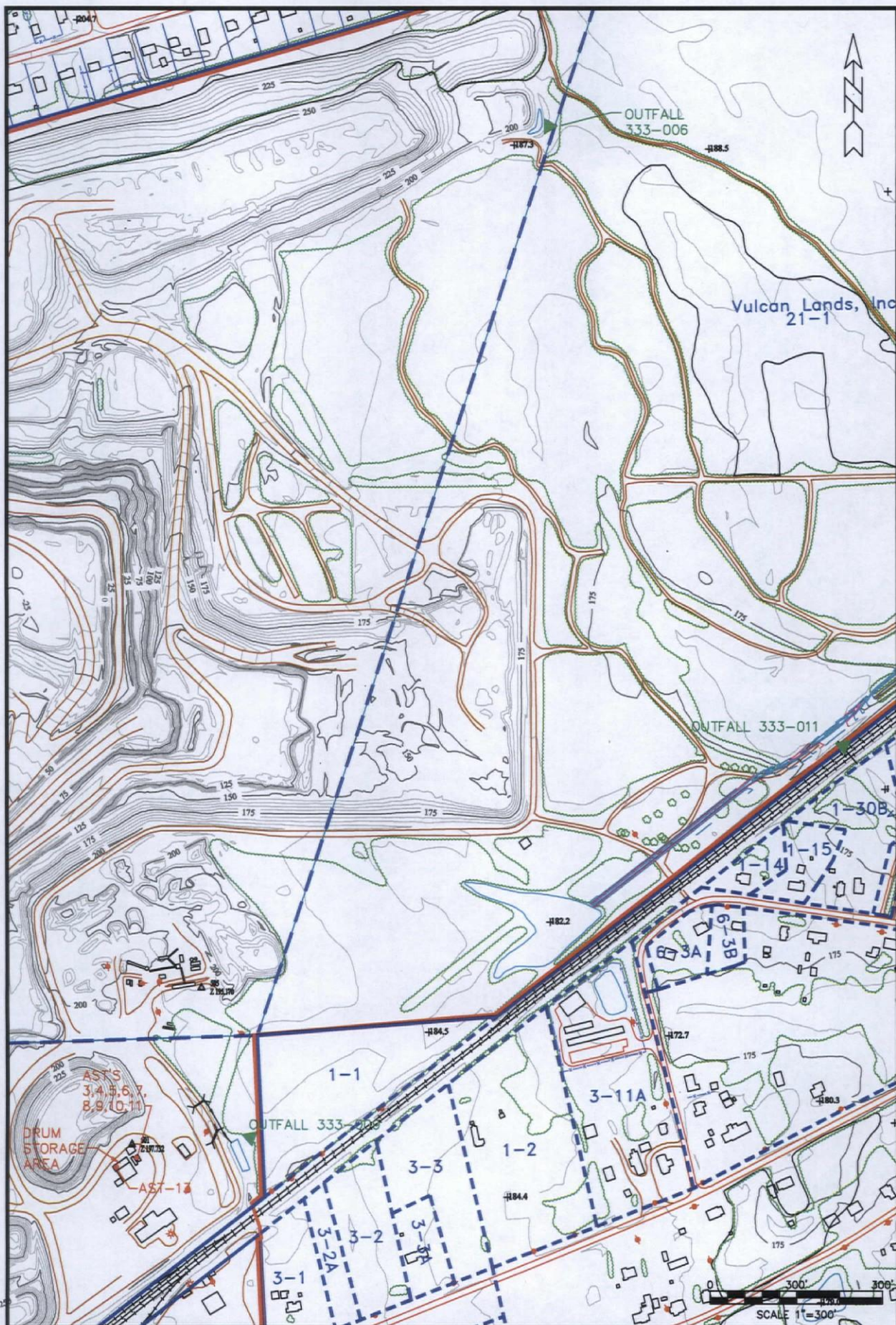
SPCC - TANK LOCATION MAP  
SPCC IFNO

JACK QUARRY  
PETERSBURG, VIRGINIA

DATE: 5/24/11  
SCALE: 1"=300'  
DESIGNED: BMP  
DRAWN: BMP  
PROJECT# PR374-03

**Vulcan**  
Construction Materials





3 of 3  
SHEET

Prepared by:



BMP/SPPP - OUTFALL LOCATION MAP  
JACK QUARRY  
PETERSBURG, VA

DATE: 8/1/11  
SCALE: 1"=300'  
DESIGNED: BMP  
DRAWN: BMP  
PROJECT# PR374-03

**Vulcan**  
Materials Company



SUBJECT: Reissuance of VPDES Permit No.VAG840126, Vulcan Construction Materials LP-Jack Quarry

TO: Jennifer Palmore

FROM: Olive Critzer *Olive*

DATE: ~~REDACTED~~ June 5, 2014

Receiving Stream: Booth Run

Waterbody ID: VAV-H39R

Latitude/Longitude: 37 11 58N / 77 30 44W

Location: 23308 Cox Road, Petersburg

Based on the outfall location identified on the attached topographic map and based on the information above, please provide me with the following:

1. Does the facility discharge to an impaired water or to an unnamed, unimpaired tributary of an impaired water for which a TMDL waste load allocation has not been established by the board and approved by EPA? N

If Yes, give the name of the impaired water: \_\_\_\_\_;

Impairment	Pollutant causing the impairment
	Y / N
	Y / N
	Y / N

2. Does any approved TMDL impose limits on discharges from this facility? Y

If Yes:

TMDL Pollutant	Does the facility discharge the TMDL pollutant?
Chesapeake Bay TMDL – TN, TP, and TSS	Y
Appomattox Basin Bacterial TMDL – E. coli – not addressed	N
	Y / N

Check if applicable:

- ☐ This facility was not included in the TMDL; however, the addition of this point source is not expected to cause water quality violations because it represents an insignificant load (less than 1%) compared to the TMDL.

- ☐ This facility was included in the Sediment TMDL for \_\_\_\_\_

(stream name)

and was given an allocation based on a TSS concentration of \_\_\_\_\_ mg/L.

## Critzer, Olive (DEQ)

---

**From:** Brian Parker [Brian.Parker@cardno.com]  
**Sent:** Wednesday, May 14, 2014 10:55 AM  
**To:** Critzer, Olive (DEQ)  
**Subject:** Updated renewals for Jack and Richmond Quarry  
**Attachments:** Jack 2014 VPDES renewal update.pdf; Richmond 2014 VPDES renewal Update.pdf

Olive – see the attached pdf packages for Jack Quarry and Richmond Quarry. As noted over the phone, Jack is adding outfall 011 and Richmond is updating the process water discharge receiving stream to Goodes Creek.

Please feel free to call me if you have any questions.

Brian Parker, P.E.  
MINING ENGINEER  
CARDNO MM&A



Phone +1 804 798 6525 Fax +1 804 496 5825 Direct +1 804 441 8388 Mobile +1 804 338 2010  
Address 10988 Richardson Road, Ashland, VA 23005, United States  
Email [Brian.Parker@cardno.com](mailto:Brian.Parker@cardno.com) Web [www.cardno.com](http://www.cardno.com) - [www.cardnomma.com](http://www.cardnomma.com)

This email and its attachments may contain confidential and/or privileged information for the sole use of the intended recipient(s). All electronically supplied data must be checked against an applicable hardcopy version which shall be the only document which Cardno warrants accuracy. If you are not the intended recipient, any use, distribution or copying of the information contained in this email and its attachments is strictly prohibited. If you have received this email in error, please email the sender by replying to this message and immediately delete and destroy any copies of this email and any attachments. The views or opinions expressed are the author's own and may not reflect the views or opinions of Cardno.